CONVERSE CONSULTANTS ORANGE COUNTY



Consulting Engineering and Applied Sciences

15245 Alton Parkway, Suite 100 Irvine, CA 92718-2307

Telephone (714) 453-2880 Facsimile (714) 453-2888

January 26, 1995

Mr. Louis Lodrigueza Orange County Health Care Agency 2009 East Edinger Avenue Santa Ana, California 92705

Subject: SUMMARY REPORT OF ADDITIONAL SITE CHARACTERIZATION

Fullerton Business Park North 1551 East Orangethorpe Avenue Fullerton, California

OCHCA Case No. 94IC29

(Converse Project No. 94-42871-03)

Dear Mr. Lodrigueza:

Converse Consultants Orange County (Converse), on behalf of Red Eagle Properties, is pleased to present this Summary Report of the Additional Site Characterization activities at the referenced property. This report documents the general activities at the referenced property associated with tetrachloroethene (PCE) contamination, discovered during the removal of the southern clarifier. For site vicinity, see Figure 1.

Background

During removal of two clarifiers from the property in September 1994, soil contamination from tetrachloroethene (PCE) and total recoverable petroleum hydrocarbons (TRPH) was discovered beneath the southern clarifier. For site layout, see Figure 2.

Initial site characterization indicated that significant contamination was not present at 15 feet beneath the former clarifier. Additional investigation was requested by the California Regional Water Quality Control Board, Santa Ana Region.

On December 2, 1994, Converse advanced six (6) soil borings using a Geoprobe Systems sampling technique. Initial depths of 15 feet bgs were targeted for investigation. Soil samples were obtained from 15 feet bgs, and were field screened using an organic vapor analyzer (OVA). Soil samples were then submitted to an on-site mobil laboratory for analysis. Borings from which the soil sample exhibited elevated levels of PCE were advanced further, and samples were obtained at five-foot intervals. Additional borings were located based on soil analytical results from previous borings.

Analytical results from the soil samples obtained indicated that further study was needed to define the vertical and lateral extent of PCE contamination.

Field Activities

On January 9 through 11, 1995, Converse advanced (9) additional soil borings on the property in an attempt to vertically and laterally characterize the extent of contamination (BH-4A through BH-6A and BH-8 through BH-13) using a Geoprobe Systems sampling technique. All borings were located based on previous soil analytical data. See Figure 3 for boring locations.

Borings BH-4A, BH-5A, and BH-6A were adjacent to BH-4, BH-5, and BH-6, respectively. Soil samples were obtained from borings BH-4A and BH-6A at 5-foot intervals, beginning at 20 feet. Boring BH-5A was a continuously cored boring to 40 feet, with soil samples obtained at 5-foot intervals, beginning at 25 feet.

Borings BH-8 through BH-13 were advanced to 40 feet, with soil samples obtained at 5-foot intervals beginning at 15 feet. Boring BH-11 was a continuously cored boring.

Soil samples from each boring were submitted to an on-site mobil laboratory for analysis. Additional borings were then located based upon the mobil laboratories analytical results. At the completion of the boring activities, the boreholes were backfilled with bentonite chips and hydrated with purified water. See Appendix A for field methodologies.

Soil Analytical Results

A total of 51 soil samples were submitted to the mobil laboratory for analysis. The samples were analyzed in accordance with EPA methods 8010 (PCE). The analytical results, including the results from borings from the previous investigations are presented in Table I.

The highest concentrations of PCE contamination occurred consistently between 20 and 25 feet bgs. PCE (less than 60 ppb) was detected in some samples obtained from 40 feet bgs at three of the nine new boring locations (BH-10, BH-11, and BH-12). Samples obtained from shallower depths in these three locations did not reveal PCE soil contamination.

For a complete copy of the analytical results, see Appendix B.

Soil Conditions and Other Observations

Generally, the subsurface soil conditions consist primarily of clayey silts and silty clays encountered at approximately 15 feet bgs and extending to approximately 35 feet bgs. Some fine grained sand with silt was encountered at 20 feet bgs and 37 feet bgs in BH-11 and BH-5A, extending to approximately 40 feet bgs, where more clayey silt was encountered. See Appendix C for the boring logs.

Ground water was not encountered in any borings, and is estimated at a depth of approximately 60 feet bgs in the area, based on information obtained from nearby monitoring wells. The gradient is believed to be towards the southwest.

Conclusions and Recommendations

Based on the findings from the additional characterization activities, it appears that contamination of the soil from PCE has essentially been defined laterally to the west and northwest of the former clarifier. The vertical extent has not been completely defined, although the highest concentrations found occur above 30 feet bgs.

The highest concentrations of PCE found in the soil occur to the west and northwest of the former clarifier at depths of 20 to 25 feet bgs. It is possible that contamination could have occurred from a source between the existing building and the former clarifier (possibly a former fill pipe). The contamination detected at 40 feet could be from migration of the suspected source (fill pipe), or from a different (possibly off-site) source.

Due to the elevated concentration of PCE contamination at depths of 20 to 25 feet, the presence of PCE at 40 feet, and your verbal suggestions, Converse recommends the installation of three (3) ground water monitoring wells on the property. This will determine if ground water has been impacted by the suspected on-site source or an off-site source.

Limitations

The findings presented herein are based on our evaluation of currently available data and were prepared in accordance with generally accepted environmental principles common to the local area in which we practice. We make no other warranty, either expressed or implied.

Converse is not responsible for the accuracy of information provided by others. This report should not be regarded as a guarantee that no subsurface contamination is present at the property beyond what has been disclosed. There may be subsurface conditions that cannot be reasonably predicted with the services performed to-date.

If you have any questions, please contact us at (714) 453-2880.

Sincerely,

CONVERSE CONSULTANTS ORANGE COUNTY

Vichael Batter

J. Michael Batten

Project Geologist

nomas J. Solieit, RGE 753

Vice President and

Principal Enginéer

No. GE753

JMB/GSS/TJS

References: Converse Consultants Orange County, "Clarifier Removal and Soil

Analysis, Fullerton Business Park North," October 18, 1994.

CONVERSE Project No. 94-42871-03

Converse Consultants Orange County, "Site Characterization Summary Report, Fullerton Business Park North," November 11, 1994.

Converse Consultants Orange County, "Summary Report, Additional Site Characterizaton, Fullerton Business Park North," December 13, 1994.

Attachments: Figure 1 - Vicinity Map

Figure 2 - Site Layout Map

Figure 3 - Detail Map

Table I - PCE Concentrations in Soil Samples

Appendix A - Field Methodologies Appendix B - Analytical Report Appendix C - Boring Logs

Distribution: 1 Addressee

1 Mr. Robert Holub, Santa Ana Regional Water Quality

Control Board

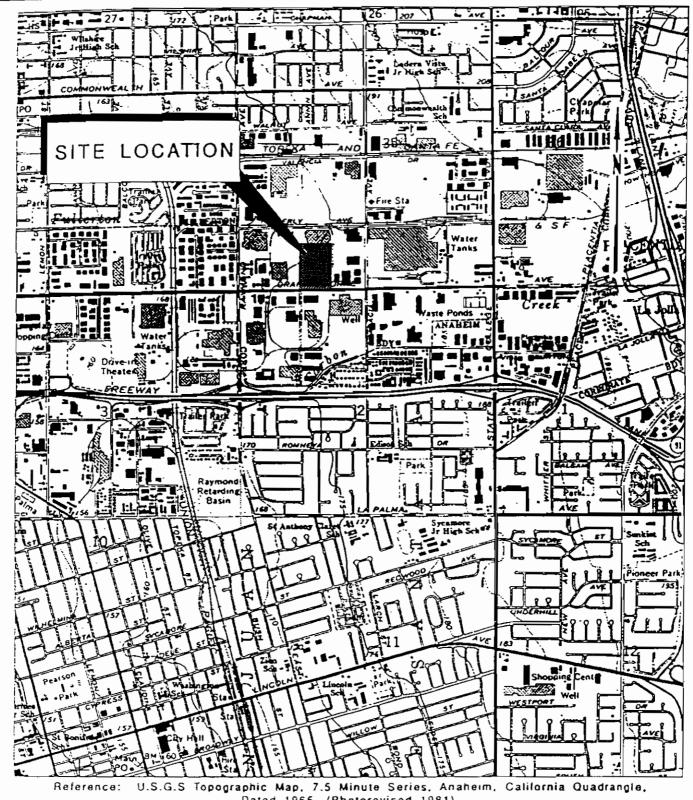
2 Mr. Carl Ross, Red Eagle Properties

1 Mr. Mark Boen, Red Eagle Properties

CONVERSE Project No. 94-42871-03



FIGURES



Dated 1965, (Photorevised 1981).



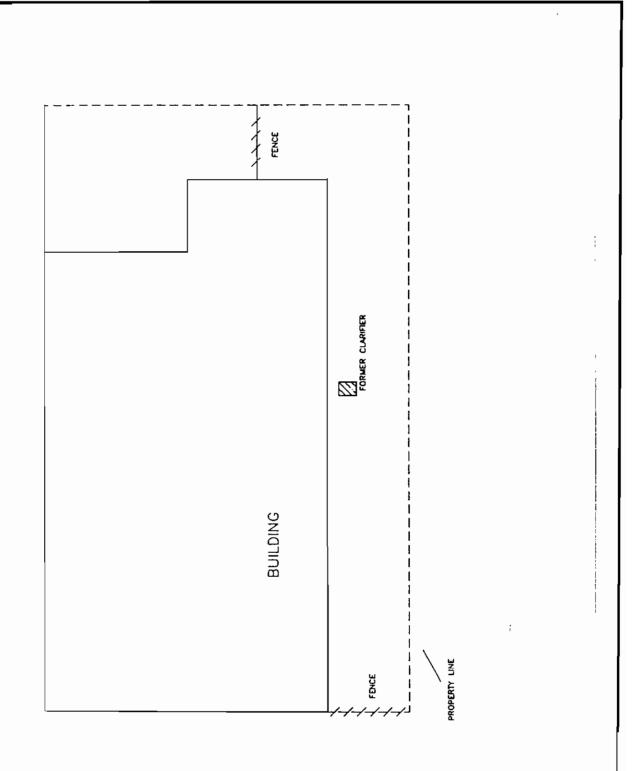
VICINITY MAP

SITE CHARACTERIZATION 1551 East Orangethorpe Avenue Fullerton, California

Protect No.

Figure No.

94-42871-03







|--|

Converse Consultants Orange County Consu

Consulting Engineering and Applied Sciences

SITE LAYOUT MAP

Fullerton Business Park North 1551 East Orangethorpe Avenue Fullerton, California & FICURE NO. 2

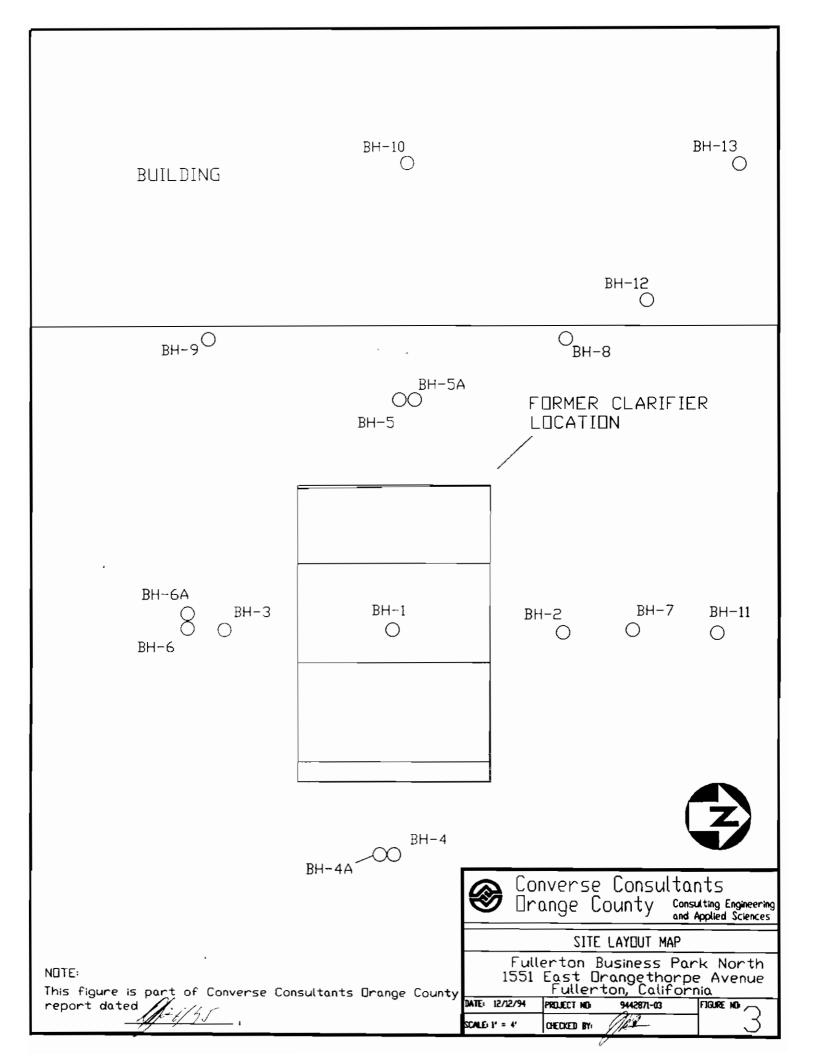
DATE: 11/14/94 CHECKED BY:

PROJECT NO: 94-42871-03

NOTE:

This figure is part of Converse Consultants Orange Caunty

report dated





TABLES

871tbl_1.wq1

TABLE I

Revised: 25-JAN-95

PCE CONCENTRATIONS IN SOIL SAMPLES

PM: JMB

FULLERTON BUSINESS PARK NORTH

(Converse Project No. 94-42871-03)

=======																
DEPTH OF SAMPLE							BORIN	G LOCATI	ON NO.							
(FT)	BH-1	BH-2	вн-3	BH-4	BH-4A	вн-5	BH-5A	BH-6	BH-6A	вн-7	BH-8	BH-9	BH-10	BH-11	BH-12	BH-13
15	ND	3,500	2 7 0	ND		84,500		ND		130	32,000	ND	570	31	190	140
20	17	320	ND		ND	96,000			ND	33 0	26,000	ND	ND	19	ND	16
25	ND	1,950	8,900		12	88,000			20	ND	92,000	18,000	ND	100	41	13
3 0	38	ND			23	•-	17,500		56		15,000	ND	ND	29	11	ND
35	ND	ND			39		1,070		ND		ND	ND	ND	ND	ND	ND
40	ND	ND			52		28	·-	N D		ND	N D	45	16	50	ND

Reported in parts per billion (ug/kg, ppb)

ND = Not Detected

-- = Sample not obtained



APPENDIX A

FIELD METHODOLOGIES

Geoprobe Advancement

The exploration program for this study consisted of Geoprobe probe advancement and drive sampling for the collection of soil samples. The probe was advanced on January 9 - 11, 1995 by On-Site Services using a Geoprobe Systems probing machine.

Probe advancement was conducted such that the locations were open to the atmosphere (air-filled) during advancement. No fluids, including clean water, or additives were used during probe advancement.

Drive Sampling

Drive soil samples were collected from the probe locations at specified depth intervals (typically 5-foot). Soil samples were obtained by driving a 1-inch diameter steel driving tube at the end of a percussion drill steel. The sampling tube was equipped with a steel drive head which was withdrawn, via the extending rod, at the upper limit of the desired sample interval. The tube was then driven into the undisturbed soil and an approximately 100 gram sample was collected over a 1-foot vertical interval. The sample was then brought to the ground surface by withdrawing the sections of drill steel.

After the sampler was removed from the probe location, the soil sample for chemical analyses was inspected to verify that there was no head space in the sample. If gravel extended from the sample, or head space was observed in the soil sample, the sample was considered invalid and an additional attempt was made to collect a valid sample. If the retrieved sample was considered valid, the brass sleeve was covered with teflon sheeting and tightly capped.

Once at the ground surface, the soil sampling tube was capped, placed into a polyethylene bag, labeled, and immediately submitted to an on-site mobil laboratory for analysis. Soil samples were collected, stored, transported and analyzed in accordance with EPA Sample Collection Codes. A Chain-of-Custody record was maintained throughout the operation. Analytical Laboratories of Orange, California (State certified laboratory) chemically analyzed selected samples in accordance with EPA Method 8010.

After a soil sample was collected, the sampling equipment was washed with alcanox and rinsed.

Chain-of-Custody Procedures

Chain-of-Custody procedures were maintained for all soil samples collected. This form was completed by the sample collector before releasing the samples to the laboratory. The chain-of-custody form was routed with the samples through transportation and analyses. Completed chain-of-custody forms were returned to Converse along with the results from the analytical laboratory. These forms are retained by Converse in the central project files, and are included in Appendix B.

CONVERSE Project No. 94-42871-03



APPENDIX B



ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

Converse Environmental West

(4708)

LAB NO G8

G83413

Attn: Mike Batton 15245 Alton Parkway

REPORTED

01/10/95

Suite 100

Irvine, CA 92718

SAMPLE

Soil

RECEIVED

01/09/95

IDENTIFICATION

As Below

Date Collected 01/09/95

BASED ON SAMPLE

As Submitted

Tetrachloroethene EPA 8010

		•
BH-5A/1	17,500	mg/kg
BH-5A/2	1,070	mg/kg
BH-5A/3	28	mg/kg
BH-6A/1	ND<10	mg/kg
BH-6A/2	20	mg/kg
BH-6A/3	56	mg/kg
BH-6A/4	ND<10	mg/kg
BH-GA/5	ND<10	mg/kg
BH-4A/1	ND<10	mg/kg
BH-4A/2	12	mg/kg
BH-4A/3	23	mg/kg
BH-4A/4	39	mg/kg
BH-4A/5	52	mg/kg

ASSOCIATED LABORATORIES, by:

Edward S. Behare, Ph.D.

Vice President

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and



ASSOCIATED LABORATORIES

806 North Batavia - Orange. California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

Converse Environmental West

LAB NO

ML00791

Attn: Mike Batten

15245 Alton Pkwy., #100 Irvine, CA 92718-2307

REPORTED

01/16/95

RECEIVED

01/10/95

SAMPLE **soil**

Red Eagle

IDENTIFICATION

Project #9442871-03

1551 Orangethorpe, Fullerton

BASED ON SAMPLE

As Submitted to Our Mobile Laboratory

Tetrachloroethene

BH-8 @ 15-15.5' BH-8 @ 20-20.5' BH-8 @ 25-25.5' BH-8 @ 30-30.5' BH-8 @ 35-35.5' BH-8 @ 40-40.5' BH-9 @ 15-15.5' BH-9 @ 20-20.5' BH-9 @ 25-25.5' BH-9 @ 30-30.5' BH-9 @ 35-35.5' BH-9 @ 40-40.5' BH-10 @ 15-15.5' BH-10 @ 20-20.5' BH-10 @ 25-25.5' BH-10 @ 30-30.5' BH-10 @ 35-35.5' BH-10 @ 40-40.5'

32,000 ppb 26,000 ppb 92,000 ppb 15,000 ppb ND<10 ppb ND<10 ppb ND<10 ppb

ND<10 ppb 18,000 ppb ND<10 ppb ND<10 ppb ND<10 ppb

570 ppb ND<10 ppb ND<10 ppb ND<10 ppb ND<10 ppb 45 ppb

ASSOCIATED LABORATORIES, by:

Edward S. Openai

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date TENORYLLING

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

Chemical •

Microbiological +

Environmentai +



806 N. Batavia • Orange, CA 92668 (714) 771-6900 • FAX: (714) 538-1209

CHAIN OF CUSTODY RECORD

Date 110 95 Page 1 of 2

DISTRIBUTION: White with report. Yellow to AL,

Pink to Courier

CLIENT_('	wasse Consultant						,						
ADDRESS 15	245 ALONA PRAY. HI	<u> </u>	PHONE NUMBER PHONE NUMBER (7/4) 453 2880 Samples Intact Yes No County Seals Intact Yes No Sample Ambient Cooled Frozen										
I RUINE	, CA. 92718-230	PHONE NU	MBER	71414	7.2 2	000		Sample AmbientCooled Frozen					
PROJECT NAME	RED EAGLE	SAMPLERS	i: (Signatu	ire) 	1	1			y 24 Hr 48 Hr				
SAMPLE NUMBER	LOCATION DESCRIPTION	DATE	TIME	S	AMPLE TY	SOLID	NO OF CNTNRS	SUSP CONTAM	TESTS REQUIRED				
1-	BU-8 15-15-5'	1/10/45	8 .20			/	1	RE	(5010) RE only 1				
2-	BA.8 20-205		825				1						
3	BH-8 2: 25.5		8:20			/	1						
4	BH-8 20-30,5'		9:15	,		V	1						
5-	P.H.S 35.35.5		9: 3u			/	1						
/	BH-8 40-40.5'		1: 53										
7- 8-	BH-9 15.15.51		10:30			/	1						
<u>8 -</u> 9 -	BH-9 ?0-20,51 BH-9 25-2551		10:45	ين دحه		/	,	,					
7 - 10 -	BH-9 30.30.5'		11:05			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			1				
//-	BH-9 35-25.2		11:40	,		1	i						
			11:54			/	1						
Refinquished by:	(Signature)	Received by: (Signature)	A	. ,	•	1	/Time	I hereby authorize the performance of the above indicated work.					
Relinquished by:	(Signature)	Received by Laboratory ((Signature)	for analys	is:		Date	/Time						
Special Instruction	ons:	:						1	·				



806 N. Batavia • Orange, CA 92668 (714) 771-6900 • FAX: (714) 538-1209

CHAIN OF CUSTODY RECORD

Date 1/10/95 Page 2 of 2

CLIENT_	engeruge Consultants	_								.2.	
ADDRESS 15	1(A, 92718-23	PROJECT !		m:Ke 714) 4			Samples Intact Yes No County Seals Intact Yes No Mix Sample Ambient Cooled Frozen				
PROJECT NAME	PED CACK	SAMPLERS	S: (Signatu	(rol	(<u>153.2)</u> T			Same Day 24 Hr Regular 48 Hr			
SAMPLE NUMBER	LOCATION DESCRIPTION	DATE	TIME	WATER	AMPLE TY	SOLID	NO OF CNTNRS	SUSP. CONTAM		TESTS REQUIRED	
13-	BH-10 15-15:5	1/10/95	2.00			v	1	PIE	Eary 1	re only!)	
M- 15-	BH-10 20-2015'		2:30			<u></u>	1				
15.	BH-10 25-255		3:15			/	1				
16-	BH-10 30-30.5'		3:30	!		/	1		•		
17-	EH-10 35-35.5"		4:10		·	V					
(5)	13/4-10 41-43.5		4.55			/	1	4		<u></u>	
						*					
Relinquished by:	Signature)/	Received by: (Signature)		3		1	/Time	t hereby a	•	performance of the above	
Relinquished by: (Received by Laboratory (Signature)	for analys	is:		Date	/Time				
Special Instructio	ns:				_						
								DISTRIBU Pink to Co		ith report. Yellow to AL,	



ASSOCIATED LABORATORIES

806 North Batavia - Orange. California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

SAMPLE

Converse Environmental West

LAB NO.

ML00794

Attn: Mike Batten

15245 Alton Pkwy., #100 Irvine, CA 92718-2307 REPORTED

01/16/95

Soil

RECEIVED

01/11/95

IDENTIFICATION

Red Eagle

Project #942871-03

1551 Orangethorpe, Fullerton

BASED ON SAMPLE

As Submitted to Our Mobile Laboratory

Tetrachloroethene

BH-11	6	15-15.5'
BH-11	6	20-20.5'
BH-11	6	25-25.5'
BH-11	6	30-30.5'
BH-11	6	40-40.5'
BH-11	6	35-35.5'
BH-12	6	15-15.5'
BH-12	6	20-20.5'
BH-12	ę	25-25.5'
BH-12	6	30-30.5'
BH-12	a	35-35.5'
BH-12	ą	40-40.5'
BH-13	e	15-15.5'
BH-13	•	20-20.5/
BH-13	6	25-25.5'
BH-13	9	30-30.5'
BH-13	9	35-35.5'

31 ppb 19 ppb 100 ppb 29 ppb 16 ppb ND<10 ppb 190 ppb ND<10 ppb 41 ppb 11 ppb ND<10 ppb 50 ppb 140 ppb 16 ppb 13 ppb ND<10 ppb

ND<10 ppb

ND<10 ppb

ASSOCIATED LABORATORIES, by:

BH-13 @ 40-40.5'

Edward S Behare, Ph.D.

Vice President

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date TEPOPEOGSUNING

Chemical •

Microbiological +

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

Environmental •



806 N. Batavia • Orange, CA 92668 (714) 771-6900 • FAX: (714) 538-1209

CHAIN OF CUSTODY RECORD

Date 1 11 95 Page 1 of 2

CLIENT (- cree Consulta.	45												
	2-15 A, TC - 13		PHONE NU	1 46	Ca	11.	<u>.</u>		Samples Intact Yes No County Seals Intact Yes No Sample Ambient Cooled Frozen					
PROJECT NAME	RED Engle		SAMPLERS	: (Signatu	ra\	, !.		<u>U</u>	Same	Day_	2	24 Hr Hr		
SAMPLE NUMBER	LOCATIO DESCRIPTI	N	DATE	TIME	WATER	AIR	SOLID	NO OF CNTNRS	SUSP CONTA			TESTS REQUIRED	€:	
1-	BH-11 - 15-1	5.5	Haters	5,5,			_	1-	PCI	<u></u>				
2 -	BH-11 25-2	•		8.50				1	1	- (2010) RE U	Jy	
3-	BH-11 25.			7:10			~	1				Ĺ		
4-	BH-11 30			1.30			/	1 -				,		
- ·	BH-11 40.	-40.5		9,50			V	1						
6-	BH-11 35.	35.5		10:10			/	1				· ·		
7-	BH-12 15-	15.5		10:20			1	1		_		(
8-	BH-12 Zu.	20.5		17:00			V	1		\perp				
9-	BH-12 25	-25.5		12:00			L	1				4		
10-	BH-12 30-	30.5		12:30			~	1						
11-	BN-12 35	35.5		12:48	,		V	1 .			_			
12	BH-12 No			1:10	:		V	/ _	b		7	b		
Relinquished by: (Signature)	y: (Signature) Date/Time							ed wo		erformance of th	e above		
Relinquished by: (Signature)	y Laboratory (or analys	š:			/Time							
Special Instruction	ns:		-		,	•		DISTR Pink to			th report. Yellow t	o AL,		



806 N. Batavia • Orange, CA 92668 (714) 771-6900 • FAX: (714) 538-1209

CHAIN OF CUSTODY RECORD

Date 1/11/95 Page 2 of 2

CLIENT	muse (Consultant	1			_									
	5245 AL			PROJECT M		_	1			Samples Intact Yes No County Seals Intact Yes No Sample AmbientCooled Frozen					
	, (A. 47)		,	PHONE NU	MBER/_	BATT		UMA							
PROJECT NAME	RED	EA-16-	,	SAMPLERS	: (Signatu	19)42	1.	880 <u> </u>		Same Day 24 Hr Regular 48 Hr					
SAMPLE NUMBER		LOCATION DESCRIPTION		DATE	TIME	_/_ SA	AIR	SOLID	NO OF CNTNRS	SUSP. CONTAM		TESTS REQUIRED			
13-	BH-13	15 15.5	.•	1/11/45	2:10			/	ţ	RE	180131	PCE ONLY			
14-		20-20			2.25			1)	•				
15-		25-25.			2:35			V	1						
16-	BH-13	30-30,5			2:55			/	1						
17-	134-13	35.35.5	. •		3:10			1	1						
18	BH 13		3:30				1		1	,					
					,										
												*,			
Relinquished by: (Signature)	y: (Signature) Date/Time 1/11/45						1 hereby authorize the performance of the above indicated work.							
Relinquished by: (Signature)	Laboratory f	or analysi	is:		Date	/Time								
Special Instruction	ns:	•					*			DISTRIBU Pink to Co		h report. Yellow to AL,			



APPENDIX C



LOG OF: BH-4A CONTRACTOR ON-SITE SERVICES DRILLER(S) ON-SITE SERVICES RED EAGLE/FULLERTON PROJECT NAME GEOPROBE 94-42871-03 RIG/METHOD PROJECT NO. N/A SCREEN INTERVAL SSM SITE GEOLOGIST(S) DRLR TD(ft) 41.00 WELL CONST TD(ft) N/A SSM LOGGED BY LOCATION T R SEC. 1/4 **ELEVATIONS(REL. MSL)** FULLERTON CO OR **CITY GRADE LEVEL(ft)** N/A COORDINATES(ft) TOP OF CASING(ft) DATE/TIME GROUNDWATER: DEPTH(ft) DATE/TIME RECORD: ATD 1/9/95 DRLG/CORING ⅀ SWL* N/A 1/9/95 WELL CONST SPL* N/A N/A WELL DEVELOP (* PRIOR TO INITIAL DEVELOPMENT) 1/9/95 **BACKFILL** PID/OVA CALIBRATION DATE: 1/6/95 CALIBRATION UNITS: 95 pom THE PID/OVA SIGNAL (READING) PRODUCED REPRESENTS A QUALITATIVE MEASURE OF IONIZABLE LITHOLOGICAL PROFILE Gvl -Gravel ORGANIC POLLUTANTS. > 2.0 mm THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTERED. PIO/OVA READING Scr -Coarse Sand €£÷ 2.00-0.50 mm ASSIFICATION Smd -Medium Sand 0.50-0.25 mm CONSTRUCTION DESCRIPTION DEPTH GRAPHICS MOISTURE OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE Sfn -Fine Sand 0.25-0.062 mm RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS Slt -Silt <0.062 mm BEDFORMS AND OTHER SEDIMENTARY STRUCTURES. Cl -Clay/Mud Gvl Scr Smd Sfn Slt Cl 겁 **ASPHALT** SAMDY SILT: FINE TO MEDIUM GRAIN SAND, BROWN. SM 1 SM 20 SAMDY SILT: INCREASING SAND, FINE TO MEDIUM GRAIN. 2 SM SM

									CONTRACTOR ON-SITE SERVICES
PROJECT NAME <u>RED EAGLE/FULL</u>									LLERTON DRILLER(S) ON-SITE SERVICES
F	ROJE	CT	NO.			94	-42	871- 0	RIG/METHOD GEOPROBE
S	SITE G	EO	LOGIST(S)					SSM	SCREEN INTERVAL N/A
I	.OGG	ED I	BY				_ 5	SSM	
E	LEVA'	TIO	NS(REL. MSL))					LOCATION T R SEC. 1/4
	GR	AD	E LEVEL(ft)	_					CITY FULLERTON CO _OR
	TO	ΡO	F CASING(ft)				ľ	I/A	COORDINATES(ft)
R	ECOR	D:			D	ATE	/ΤΙ	ME	GROUNDWATER: DEPTH(ft) DATE/TIME
	DR	LG,	CORING			1/11	/95	;	ATD <u>N/A</u>
	WE	ELL	CONST			1/11	/95	5	SWL*N/A
	WE	LL	DEVELOP			N/	/A		=
	ВА	CKI	TLL			1/11	/95	5	(* PRIOR TO INITIAL DEVELOPMENT)
			LITHOLOGICAL PI	ROFILE		PID/O	WA .	CALIB	BRATION DATE: 1/6/95 CALIBRATION UNITS: 95 pom
			Gvl -Gravel		- (ORGAN	IIC	POLLU	SIGNAL (READING) PRODUCED REPRESENTS A QUALITATIVE MEASURE OF IONIZABLE UTANTS.
	ING		> 2.0 mm Scr -Coarse Sa	and		THIS Subsu	SUM IRFA	MARY CE CO	APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTERED.
SAMPLE	READING	(++)	2.00-0.50 Smd -Medium Sa						
SAI			0.50-0.25		S	MELL CONSTRUCTION	ш	SOIL	DESCRIPTION
EN	PID/OVA	ЕРТН	Sfn -Fine Sand 0.25-0.06		GRAPHICS	ᅻᄓ	MOISTURE	무윤	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY
ũ	è	ă	0.25-0.00 Slt -Silt <0.0		픁	强	ISI	SE	MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS
	<u>C</u>		Ct -Clay/Mud		Ğ	SS	운	SS	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.
			Gvl Scr Smd Sfn S	slt Cl		ខ		SCLASSIF	
		- 0 -						- -	ASPHALT
		-							CAND CAND TO MEDIUM COATH IT DOGW
							SATI	SP	SAMO: FINE TO MEDIUM GRAIN, LT.BROWN
		- 5 -			• • • •				
				•					
		<u> </u>							
		L _							
		10							
		- 10-							
		- 1			: :				
		_		ŀ			SM	ML	CLAYEY SILI: DRK. BROWN, INCREASING FINES.
					H				
					W				INCREASING CLAY.
1		15					SM	SP	SAMO: FINE TO MEDIUM GRAIN, LT. BROWN.
	-				\mathcal{U}		SM	SM	SAMDY SILI: FINE GRAIN SAND, BROWN.
				[sm	SP	SAND: FINE TO MEDIUM GRAIN, LT. BROWN.
2		20	_	-					
۲					\mathcal{H}		sm	ML	CLAYEY SILI: DRK BROWN.
									CAMPA CLIT. FINE TO MEDIUM CDAIN DOWN
							SM	SM	SAMDY SILI: FINE TO MEDIUM GRAIN, BROWN.
		.]		:					CLANDY CVIT. DOK. GDOWN
					ďТ		SM	ML	CLAYEY SILT: DRK. BROWN.

			LITHULUGICAL PRUFILE			7	UNVI	RSE ENVIRONMENTAL WEST - O.C. SHEET 2 OF 2
	<u>ত</u>		Gvl -Gravel		₹			CT NAME RED FAGLE/FULLERTON LOG OF: RH-11
ш	Ħ	^	> 2.0 mm Scr -Coarse Sand				_	CT NO LOG OF:RH-11
SAMPLE	READING	±	2.00-0.50 mm		Z		SOIL CLASSIFICATION	
革	띭	Ξ	Smd -Medium Sand	(U	CONSTRUCTION	w		DESCRIPTION
SA		I	0.50-0.25 mm	GRAPHICS	.∺	쯪	Ţς	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE
	PID/01A	DEPTH	Sfn -Fine Sand	Ξ	드	=	보기	RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY
EN	6	Ü	0.25-0.062 mm	4	빚은	IS	않止	
ш	è		Slt -Silt <0.062 mm	斑	<u>\S</u>	Ö	, .X	MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS
	2		Cl -Clay/Mud	9	5	_	Œ	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.
			GVI Scr Smd Sfn Stt Cl		L		ᆸ	
		- 25 -		77				SILTY SAND/SANDY SILT: INCREASING SAND, BROWN.
3			-	1:1:	j	SM	SM	The state of the s
					1			
					1			
				11	1			
				11				CLAVEN CILT. DDV DDCIBI
				W	1	SM	ML	CLAYEY SILI: DRK. BROWN.
4		- 30-			1	ŞM	SM	SANDY SILY: FINE TO MEDIUM GRAIN SAND, DRK. BROWN.
`				M	1			CLAYEY SILT: DRK. BROWN, INCREASING CLAY.
				W	1	SM	ML	•
			1	W	1			
				\rightarrow	1	e mi	CL	SILTY CLAY: DRK. BROWN.
		_		44	1	SUT		
		_			1	SM	SM	SANDY SILT/SILTY SAND: BROWN, FINE TO MEDIUM GRAIN SAND.
5		- 35-		1:1				
_				بكنانا	1			SAMD: FINE TO MEDIUM GRAIN, LT. BROWN.
						SM	SP	ADDRESS TO THE TO THE TOP WORLD, ET. DROWN.
		-	1	:	1			
					1			
					1			
		•		W	1	SM	ML	CLAYEY SILT: DRK. BROWN.
6		- 40 -		H				
"					1			
								PROBER'S TOTAL DEPTH = 4D.5 FEET BELOW GROUND SURFACE.
	1 1							NO FREE GROUND WATER ENCOUNTERED BELOW GROUND SURFACE.
		-						
		- 45-				-		
		-						
		-						
		- 50 -						
	 	- 55 -						
		-						
		- 60-			 		 	
	ļ							
		-						
	-	-						
		65-		_				



											CONTI	RACTO	R	ON-SITI	E SERVICES			
F	ROJE	CT	NAME .	RE	D	EAGI	Œ/	FUL	LERTON	_ I	ORILL	ER(S)		ON-SITI	E SERVICES			
	ROJE								3	RIG/METHODGEOPROBE								
S	ITE G	EO	LOGIST(S)				5	SM		SCREEN INTERVALN/A DRLR TD(ft) 41.00 WELL CONST TD(ft) N								
	<u>.OGG</u>]						5	<u>SSM</u>		DRLR TD(ft) 41.00 WELL CONST TD(ft)								
El			NS(REL. MSL)							LOCATION T R SEC. 1/4								
	GR	ADI	E LEVEL(ft)	_					-	ITY			FULLER	ron	co	_OR		
	TO	P O	F CASING(ft)					I/A	C			res(ft)		_				
RI	ECOR	D:			D	ATE,	/TI	ME		GRO)UND	WATE	R: DE	PTH(ft)	DATE/TIM	E		
	DR	LG/	CORING .			1/9,	/95			<u>¥</u>	ATD)			N/A			
	WE	ELL	CONST			1/9/	/95			Ā	SWL	,*			N/A			
	WE	ELL	DEVELOP .			N/	'A			₽	SPL	•		N/A	N/A			
	BA	CKF	TLL_			1/9/									LOPMENT)			
			LITHOLOGICAL PR	OFILE		PID/O	VA ID/	CALIB OVA S	RATION DATE: IGNAL (READING)	PRODI	1/6/9	5 Present	_ CALIBRA	TION UNITS TATIVE MEAS	SURE OF IONIZABL	.Ē		
	_o		Gvl -Gravel > 2.0 mm			ORGAN	IC	POLLU	TANTS.									
Щ	Ň	$\overline{}$	Scr -Coarse Sa			SÜBSU Passa	RFA GE	CE CO OF TI	NDITIONS MAY DI ME. THE DATA PR	FFER RESENT	AT OTHE	R LOCATI	ONS AND MA	Y CHANGE A	E TIME OF DRILL! T THIS LOCATION CONDITIONS ENCOU	WITH THE NTERED.		
SAMPLE	READING	(++)	2.00-0.50 Smd -Medium Sa			z		ON				DE	SCRIPTI	ONI				
		Ξ	0.50-0.25	mm	လ	WELL	띶	SOIL CLASSIFICATION	OVERALI	LITH	N DGY				ND AND GRAVEL SI	ZE		
ENO	6	DEPTH	Sfn -Fine Sand 0.25-0.06		보	그일	Ĭ	ဌ			•		•	•	NG, ACCESSORY			
ш	PID/OVA		slt -silt <0.0	62 mm	GRAPHICS	强	SIC	SIF							LITHIC FRAGMENTS	S		
	"-		Cl -Clay/Mud	, -	5	NO.	Ξ	AS	BEDFORM	IS AND	OTHER	SEDIMEN	TARY STRUC	CTURES.				
		0-	Gvl Scr Smd Sfn S	it Ci				ರ										
		Ŭ.							ASPHAL I									
		ļ.,																
		5 -			Ш		_											
		-	_															
		-																
			1															
		10-																
]															
		-																
		_																
		-																
		15-			Ш													
		-																
		-																
		-																
1		-				-	sm	SM	SAMDY SILI: F	INE TO	MEDIU	M GRAIN	SAND, BROW	M, CHLORIN	NATED ODOR.			
		- 20-																
		-																
		-																
2		-	1				sm	SM	SILTY SAND: I	NCREAS	SING SA	ND, FINI	E TO MEDIC	M GRAIN, S	SLIGHT ODOR.			

SHEET 1 OF 2

										_		RACTO	R		SERVICES		
			NAME _	RE	D		-		LERTON			ER(S)	_		SERVICES OPPORE		
	ROJE				_	94		871-0. SSM	5	_ RIG/METHOD <u>GEOPROBE</u> SCREEN INTERVAL <u>N/A</u>							
	OGG:		LOGIST(S) _					SSM SSM				TD(ft)	41.00	WELL (CONST TD(ft)	N/A	
			NS(REL. MSL))()IVE	LC		ION		R SEC.	1/4			
			E LEVEL(ft)							TY			ULLER	TON	co	OR.	
			F CASING(ft)				_	I/A				res(ft)					
DI	ECOR		CASINOTE		ח	ATE						WATER	: DE	PTH(ft)	DATE/TIME	3	
Kı			100 55 15				•			Ţ	ATD		. – –	()	N/A		
		•	CORING _			1/10	-			<u>~</u>	SWL				N/A		
			CONST .			1/10	•)		<u></u>	SPL ⁴		-	N/A	N/A		
			DEVELOP _					,		=			TNITI		LOPMENT)	•	
	BA		TLL	25115		1/10	<u> </u>		RATION DATE:		1/6/9			TION UNITS			
			LITHOLOGICAL PR Gvl -Gravel	OFILE		THE P	ID/	OVA S POLLU	IGNAL (READING) TANTS.		CÉD RE	PRESENTS	A QUALI	TATIVE MEAS	SURE OF IONIZABL		
	Ş		> 2.0 mm			THIS	SUM	MARY CF CO	APPLIES ONLY AT	THE L	OCATIO	N OF THE	S BORING	AND AT TH Y CHANGE A	E TIME OF DRILLI T THIS LOCATION ONDITIONS ENCOUN	NG. WITH THE	
٣	READING	£±	Scr -Coarse Sar 2.00-0.50			PASSA			ME. THE DATA PRE	ESENTE	D IS A	SIMPLIF	CATION O	F ACTUAL C	ONDITIONS ENCOUN	TERED.	
SAMPLE	RE	~	Smd -Medium Sar 0.50-0.25			공		합				DES	CRIPTI	ON			
	Ą	EPTH	Sfn -Fine Sand	1188	S	NOIT	RE	Ä	OVERALL	LITHO	LOGY,	TEXTURE,	COLOR A	ID, FOR SAM	D AND GRAVEL SIZ	E	
₽	PID/OVA		0.25-0.062		GRAPHICS	핔쫈	STL	탮			-				IG, ACCESSORY		
	ΡI		Sit -Silt <0.00 Cl -Clay/Mud	52 mm	GRA	MELL CONSTRUCT	MOISTURE	SOIL CLASSIFICATION				-	ARY STRUC		LITHIC FRAGMENTS		
			GVI Scr Smd Sfn S	lt Cl		8		Ä									
		0 -		.	1111	•	_		ASPHALT								
		-															
		-															
		-															
		- -	1														
		5 -							_								
		-															
			Ì														
		10-															
ľ		10]														
		ļ _															
		L _															
					Ш			ML	SANDY SILT: FI	NE GRA	AIN SAI	KD BROW	I. CHLORT	NATED ODOR	_		
1		15-			7	_	SM	FL.			1111 5/11				<u> </u>		
1					ĬII	1											
		-			$\ \ $												
2		L .			111	}	SM	SM	SANDY_SILT: FI	NE TO	MEDIU	M GRAIN S	SAND, BROW	N, CHLORIN	ATED ODOR.		
		20-			+	_		-						<u> </u>			
		-															
3					111	:	SAR	SM	SILTY SAMD: IN	CREASI	ING SAI	ND, FINE	TO MEDIC	M GRAIN, S	LIGHT ODOR.		

ı			LITHOLOGICAL PROFILE			2	ONVE	ERSE ENVIRONMENTAL WEST - O.C. SHEET 2 OF 2
	NG		Gvi -Gravel > 2.0 mm		V	7 P	ROJE: ROJE:	CT NAME RED FAGLE/FULLERTON LOG OF: BH-8
쁘	PID/OVA READING	(+)	Scr -Coarse Sand 2.00-0.50 mm		_			
SAMPLE	RE)	Smd - Medium Sand	S	P	Į Į	TI	DESCRIPTION
	Æ	DEPTH	0.50-0.25 mm Sfn -Fine Sand	GRAPHICS	泸	15	FG.F	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE
₽N	₹	핊	0.25-0.062 mm	휸	屈돈	ISI		RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS
"	_I_		Slt -Silt <0.062 mm Cl -Clay/Mud	R	MELL	문	SOIL CLASSIFICATION	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.
	_	45	Gvl Scr Smd Sfn Slt Cl		ដ		5	
		- 25-			-			
		-						
				Щ.				CAMPA CLIT. THE TO HERITIM COATH DRY COOKS CLICUT COOR
4		30-				SM	SM	SANDY SILT: FINE TO MEDIUM GRAIN, DRK. BROWN, SLIGHT ODOR.
		30						
		_						
		L .						
		ļ.,		Щ				SANDY SILT: FINE TO MEDIUM GRAIN, BROWN, SLIGHT COOR.
5		35-				SM	SM	STATE STATE TO RESIGN SEATTLY SHOWN, SEASON SEATTLE
		ļ. <u>.</u>						
		ļ.						
		ļ .		Щ	;			CLAVEY CILT. TRACE CAND. CLICHT COCO
6		40-		\mathcal{U}		\$M	ML	CLAYFY SILT: TRACE SAND, SLIGHT ODOR.
				11	1			
								PROBER'S TOTAL DEPTH = 41 FEET BELOW GROUND SURFACE. NO FREE GROUND WATER ENCOUNTERED SELOW GROUND SURFACE.
		ļ. .			I			NO FREE GROUND WATER ENCOUNTERED SELOW GROUND SORTAGE.
		-						
		45-			<u> </u>	ļ		
		-						
		-						
		L .						
_		50-				\vdash	-	
		-						
		-						
		- -						
\vdash		- 55 -						
		-						
		- 60-						
		_						
		- -						
		- 65 -						



											CONT			ON-SITE SERVICES ON-SITE SERVICES		
F	ROJE	CT	NAME .	RE	D		-		LERTON		ORILL	• •				
	ROJE					94		871-0	3		RIG/M			GE	OPROBE	
			LOGIST(S)					SM			ORLR		ERVAL 41.00	WEII	N/A CONST TD(ft)	N/A
	LOGG						- 2	SSM			TION				CONST TECH	14/14
E			NS(REL, MSL)							ZITY	11011	•	FULLER'	•		_OR
			E LEVEL(ft)	_			_	1/1			ראותו	rrec/fe				
			F CASING(ft)		_			I/A			DINA			·DVTT I/GA	DATE TIME	
R	ECOR	D:			D	ATE	/TI	ME			OUND		K: DE	PTH(ft)	DATE/TIM	E
	DR	LG	CORING .			1/10	/95			<u>¥</u>	ATD				N/A	
	WE	ELL	CONST .			1/10	/95	;		Ā	SWL	,*			N/A	
	WE	ELL	DEVELOP .			N/	'A			₽	SPL*		'	N/A	N/A	
	BA	CKI	FILL			1/10					_				LOPMENT)	
			LITHOLOGICAL PR	OFILE		PID/O	VA	CALIB	RATION DATE:) PROD	1/6/9	PRESEN	CALIBRA	TION UNITS	SURE OF IONIZABL	LE
	(D		Gvi -Gravel > 2.0 mm			UDICAN	IC.	POLLU	TANTS.							
ш	INC		Scr -Coarse Sa			SUBSU PASSA	SUM RFA GE	CE CO OF TI	NDITIONS MAY DE	I FFER RESENT	AT OTHE	R LOCAT	IONS AND MA	Y CHANGE A	E TIME OF DRILL AT THIS LOCATION CONDITIONS ENCOU	WITH THE NTERED.
SAMPLE	READING	£	2.00-0.50												_	
SA		l	Smd -Medium Se 0.50-0.25		S	MELL	ш	SOIL CLASSIFICATION					SCRIPTI			
EN	Š	DEPTH	Sfn -Fine Sand 0.25-0.06		茾	卢턴	2	먑			•		-		ND AND GRAVEL SI NG, ACCESSORY	ZE
<u> </u>	PIO/OVA	ā	Slt -Silt <0.0		GRAPHICS	强돈	SI	SE							LITHIC FRAGMENT	s
	ď		Cl -Clay/Mud		8	SNO	£	ASS	BEDFORM	4S AND	OTHER	SEDIME	NTARY STRUC	CTURES.		
			Gvl Scr Smd Sfn S	lt Cl		ū		겁								
		0 -							ASPHALT			,				
		_]		Ш											
		•]		Ш											
					!!!!											
		5 -			Ш											
					Ш											
		L.			l											
		L .			Ш											
					Ш											
		10-			Щ											
		10			Ш											
		L .			Ш											
					III											
_					Щ				SANDY SILT: F	THE CO		ND 000	ATH CHIUDI	NATER ORDE	•	
1		 - 15-			И	1	SIR	SM	SAMUE SILI: F	THE UP		NU, BRC	ANN, CHECKI			
				l	Ήí	1										
		ļ .			Ш											
		ļ <u>-</u>		ĺ	Ш											
_				-	Щ	,		CM	SAMDY SILT: F	INE TO	MEDIL	M GRAIN	I SAND RROL	N. SOME CI	AY.	
2		20-			41		SIII	SM						,		_
					$\parallel \parallel$	†										
,					Щ		-	SM	SILTY SAND: F	INE TO	MEDIL	M GRAIN	I. SLIGHT O	DOR.		
3					IJJ	3	ЭII	341					.,			

l I	1		LITHOLOGICAL PROFILE			C	ONVE	ERSE ENVIRONMENTAL WEST - O.C. SHEET 2 OF 2
	மு		Gvl -Gravel		(V	P	ROJE	CT NAMERED FAGLE/FULLERTON
ш	READING	^	> 2.0 mm Scr -Coarse Sand			P	KOJE	CT NO
ENV SAMPLE	<u> </u>	f †>	2.00-0.50 mma		폵		SOIL CLASSIFICATION	DESCRIPTION
듄	₩	\sim		ည	빝	띭	F	
ေ	PID/OIA	王	0.50-0.25 mm \$fn -Fine Sand 0.25-0.062 mm \$lt -Silt <0.062 mm	GRAPHICS	그딘	2	25	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE
≩	Ó	믑	0.25-0.062 mm	후	교존	S	ÄΕ	RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY
ш	è			ğ	72	₽	, iči	MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS
	⊑ ∣		Cl -Clay/Mud	۳	ģ	_	ا کھا	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.
		- 25 -	Gvl Scr Smd Sfn Slt Cl	** **			ᆲ	
		45			1			
	-							
	-							
				Щ	,			CLAYEY SILT: SOME FINE GRAIN SAND, DRK. BROWN, SLIGHT ODOR.
4		20		W	1	SM	ML	LINET SILI. SOME FINE GRAIN SAND, DAK. BROWN, SETUIN COSA.
		- 30-		W	1			
						ļ		
				$\ \ \ $				
				ЩЦ				SAMD: FINE TO MEDIUM GRAIN, BROWN, SLIGHT ODOR.
5		~=				SM	SP	SAME: FIRE TO HEDION GRAIN, BROWN, SETGIT COCK.
		- 35-		1111				
		-		<u>'</u> {		ĺ		
		-		}				
		- -		Ш				
				Щ	ļ			COLOR TO MERCIAL ARATH CAMP COMP OF AN ANALYSIA
6		40]	SM	ML	SANDY SILT: FINE TO MEDIUM GRAIN SAND, SOME CLAY, SLIGHT ODOR.
		40-			1			
!				1	1			PROBER'S TOTAL DEPTH = 41 FEET BELOW GROUND SURFACE.
							1	NO FREE GROUND WATER ENCOUNTERED BELOW GROUND SURFACE.
					ł			
		. 45						
		- 45-						
		-		ĺ				
		-						
		L -						
		- 50-						
		30						
		-						
		-						
		-						
		- 55-			 	-		
		_						
		•						
$\vdash\vdash$		- 60-				-		
						1		
					1			
		- 65 -		L_	I	<u> </u>	_	

SHEET 1 OF 2

															-	
										C	ONTE	RACTOF	<u> </u>	ON-SIT	E SERVICES	
F	ROJE	CT	NAME .	RE	D	EAG	LE,	/FUL	LERTON		RILL	` '	-		E SERVICES	
F	ROJE	CT	NO		_	94		8 71- 0	3		•	ETHOD		GE	OPROBE	
S	ITE G	EO.	LOGIST(S) .					SSM		_		N INTE			N/A	 ,
	.OGGI					_		SSM_				TD(ft)	41.00		CONST TD(ft)	N/A
EI	LEVA?	ПО	NS(REL. MSL)								ION	TR		•		
	GR	AD	E LEVEL(ft)			_				TY			ULLER	ron	CO	OR
	TO	PΟ	F CASING(ft)				1	I/A_		OORI	INAI	ES(ft)			<u> </u>	
RJ	ECOR	D:			D.	ATE	/T	ME		GRO	UND	WATER	DE	PTH(ft)	DATE/TIME	;
	DR	LG	CORING .			1/10	/95	<u> </u>		<u>¥</u>	ATD				N/A	
			CONST			1/10	•			₹	SWL	•			N/A	
			DEVELOP			 N_	•			Ē	SPL*	ı		N/A	N/A	
			FILL			1/10		;			(* PF	UOR TO	INITIA	L DEVE	LOPMENT)	
		_	LITHOLOGICAL PR	OFILE		DID/C	A/A	CAL ID:	RATION DATE:		1/6/05	-	CAL IRPA	TION INITS	• 95 nom	
			Gvl -Gravel	V		THE P	ID/	OVA S POLLU	IGNAL (READING) TANTS.						SURE OF IONIZABLE	
	9		> 2.0 mm			THIS	SUM R F A	MARY CE CO	APPLIES ONLY AT	THE L	OCATIO	N OF THIS	S BORING	AND AT TH Y CHANGE A	E TIME OF DRILLI	NG. WITH THE
Щ	READING	£	Scr -Coarse Sa 2.00-0.50			PASSA	GE	OF TI	NE. THE DATA PRI	ESENTE	DISA	SIMPLIFI	CATION O	F ACTUAL C	ONDITIONS ENCOUN	TERED.
SAMPLE	RE	5	Smd -Medium Sa			Ιz		SOIL CLASSIFICATION				DES	CRIPTI	ON		
	- 1	DEPTH	0.50-0.25		S	MELL	띭	PΤ	OVERALL	LITHO	LOGY, 1			_	ND AND GRAVEL SIZ	E
ENC	PID/OI4	닖	Sfn -Fine Sand 0.25-0.06		SRAPHICS		MOISTURE	덮			-			-	NG, ACCESSORY	
	ğ		sit -silt <0.0	62 mm	RAF	캢	H	Sign				-			LITHIC FRAGMENTS	
	-		Cl -Clay/Mud		5		Ξ	AS.	BEDFORMS	S AND	OTHER :	SEDIMENTA	RY STRUC	CTURES.		
		- 0 -	GVL Scr Smd Sfn S	lt Cl				ರ							_	
		٠.			\prod	1			<u>ASPHALT</u>							
		_														
		5 -			Ш											
		3														
		_]													
		_	1													
			1													
		10-														
		-														
		- -														
1		-	1		7	1	sm	ML	SANDY SILT: FI	NE GR	AIN SAN	ID, BROWN	-			
		- 15-			47	1			_							
			1													
			1													
	}	-	1													
2	}	-	1				SM	SM	SANDY SILT/SIL	TY SA	MD: INC	CREASING	SAND-FIN	E TO MEDIU	M GRAIN BROWN,	
		- 20-				-										
		_	-													
	•	-	1													
	}	-	-													
3	-		-		W	†	SM	ML	SANDY SILT: FI	NE GR	AINSAND).				

ı	1		LITHOLOGICAL PROFILE			ر د	ONVE	RSE ENVIRONMENTAL WEST - U.C. SHEET 2 UF 2
	ဖြွ		Gvl -Gravel > 2.0 mm		₹	P P	ROJE	CT NAME RED FAGLE/FULLERTON LOG OF: BH-10
Щ	READING	•	Scr -Coarse Sand	_				CINO
SAMPLE	점	ŧ	2.00-0.50 mm		WELL		SOIL CLASSIFICATION	DESCRIPTION
Œ	<u>~</u>	_	Smd -Medium Sand 0.50-0.25 mm	ပ္ပ	Ľ	RE	₩	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE
	PID/OVA	OEPTH	Sfn -Fine Sand	GRAPHICS	그의	2	보험	RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY
ENS	Ó	Ш	0.25-0.062 ===	듄	무준	IS	양노	MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS
۳ ا		0	1	8	S	Ş	23.	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.
	<u>P</u> .		Cl -Clay/Mud	-		-	اڭ ا	DEDICARD NAD OTHER SEPTEMBER STROSTORES
\vdash		- 25-	Gvl Scr Smd Sfn Slt Cl	ru	_		Ö	
				M	1			
		•						
			_					
١.				Щ	1			SANDY SILT: SOME FINE GRAIN SAND AND CLAY, BROWN, SLIGHT ODOR.
4		-30-		Ш	<u>1 </u>	SAR	ML	
		30		44	1			
			-	Ш				
			-	ЩЩ				
				Ш				
				Щ	1			CAMPA FINE TO MEDIUM CDAIN IT DOCUM
5				:::	1	SM	SP	SAMO: FINE TO MEDIUM GRAIN, LT. BROWN.
		- 35-		1				
1		-	1	IIII	ĺ			
		L.	1					
		L.						
		_		Щ	↓			
6		· `			:	sm	SM	SANDY SILT: FINE TO MEDIUM GRAIN SAND, SOME CLAY.
		- 40-						
		-	-	Ш	1			
			1			1		PROBER'S TOTAL DEPTH = 41 FEET BELOW GROUND SURFACE. NO FREE GROUND WATER ENCOUNTERED BELOW GROUND SURFACE.
								NO TREE GROOMS WATER EROSCHERES SEEDS STREET
		- 45-			<u> </u>	_		
			-					
		-	<u> </u> 					
	 	- 50						
			-					
			-					
		- 55						
		<i>_</i>						
		- 60-				Г		
			-					
		- بر						
		- 65-		_		_		

			LITHOLOGICAL PROFILE			C	ONVE	ERSE ENVIRONMENTAL WEST - O.C. SHEET 2 OF 2
	<u>ත</u>		Gvi -Gravel > 2.0 mm		₹	P	ROJE	CT NAMERED_EAGLE/FUILLERTON CT NO LOG OF:BH-5A
	READING	^	Scr -Coarse Sand			_ P	KOJE	CT NO LOG OF: RH-5A
SAMPLE	E	‡	2.00-0.50 mm		z		CLASSIFICATION	D. E.C. CHIMITON
벌		\overline{z}	Smd -Medium Sand	ம	ᅵ유	ш	ᄇ	DESCRIPTION
l Se ∣		I	0.50-0.25 mm	GRAPHICS	LΗ	굨	<u> </u> Œ	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE
	5	Ē	Sfn -Fine Sand	모	35	ゖ	[편편]	RANGE AND MEDIAM, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY
ENS	PID/OVA	DEPTH	0.25-0.062 mm	₽	男돈	n	양님	MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS
ш			Slt -Silt <0.062 mm	Ř	_8	Ş	53	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.
	│ दि │		Ct -Clay/Mud		Ņ	_	č ;	BEDFORMS AND OTHER SEPTHENTAKT STRUCTURES.
			Gvl Scr Smd Sfn Slt Cl				ರ	
		- 25-		W	1	SITI	ML	CLAYEY SILT: DRK. BROWN, CHLORINATED ODOR.
		-	-	W	1			
		L.		14]			SILTY SAND: FINE TO MEDIUM GRAIN SAND, BROWN, CHLORINATED COOR.
				围	1	SM	SM	SILIT SAME: FIRE TO REDIGH GRAIN SAND, BROWN, GRECKINATED GOOK.
				H	1	SM	SM	SANDY SILT: FINE TO MEDIUM GRAIN SAND, CHLORINATED ODOR.
		L.			1			
				 	4		MI	CLAYEY SILT: SOME SAND, INCREASING CLAY, DRK, BROWN
1		- 30-		M	1	-500	- M	
				W	1			
				M				
		┞ ‐	1	M	1			
		├ .	1	1	1		SM	SAMDY SILT: FINE TO MEDIUM GRAIN SAND, BROWN.
		L			1	3 111	УП	
		·]		:			
2		35-		Ħ	 	SM	ML	CLAYFY SILI: BROWN, CHLORINATED ODOR.
۱ "		L.]	И	1	"	, -	
				אנא	1		SP	SAND: FINE TO MEDIUM GRAIN, CHLORINATED ODOR.
		├ .	1			3411	3r	,
					:			
					:]			
]		:			
3		- 40		11	-	sm	SM	SANDY SILT: TRACE CLAY, FINE TO MEDIUM GRAIN SAND.
•			1		:]			SILTY SAND
	,			1	1	SM	SM	
		Γ.	1					PROBER'S TOTAL DEPTH = 41.5 FEET BELOW GROUND SURFACE.
			1					NO FREE GROUND WATER ENCOUNTERED BELOW GROUND SURFACE.
			1					
		- 45				ļ		
			1					
			1					
		٠.	1					
			-					
		- 50					<u> </u>	
		30						
			1					
			-					
		Γ.						
			1					
		- 55			-		-	
		L						
		Γ.]					
		ነ ነ	-					
		ļ						
		Γ.]					
		60						
			1					
		-	-					
		65		-		_		-

							_	_			201 100	· · OTO		ON CIT	TE OFFINIONS	
					_							RACTOR	·		TE SERVICES	
			NAME .	RE	D				LERTON		ORILLI	. ,			E SERVICES	
	PROJE							871- 0	3		•	ETHOD			EOPROBE	
								SSM				N INTE		WELL	N/A	NI/A
	LOGG							SSM_	T. (ORLR T		41.50	<u>WELL</u> 1/4	CONST TD(ft)	N/A
E.			NS(REL, MSL)								ΠOΝ					
	GR	(AD	E LEVEL(ft)							ΤY			ULLER1	<u>ron</u>	0	_OR
	TO	PO	F CASING(ft)				1	N/A	C	OOR	DINAT	ES(ft)				
R	ECOR	D:			D	ATE	/T	ME			UNDV	WATER:	DE	PTH(ft)	DATE/TIME	3
	DR	LG,	CORING .			1/9	/95			₹	ATD				N/A	
	WE	ELL	CONST			1/9	/95			록	SWL	•			N/A	
	WE	ELL	DEVELOP			N.	/A			₽	SPL*			N/A	N/A	
	BACKFILL						/95				(* PR	IOR TO	INITIA	L DEVI	ELOPMENT)	
			LITHOLOGICAL PR	OFILE					RATION DATE: IGNAL (READING)		1/6/95		CALIBRAT	TON UNIT	\$: <u>95 ppm</u>	
			Gvl -Gravel			ORGAN	IIC	POLLU	TANTS.							
	ING	_	> 2.0 mm Scr -Coarse Sar	nd		THIS	SUN	MARY CE CO	APPLIES ONLY AT	THE	OCATION AT OTHER	N OF THIS	BORING	AND AT T	HE TIME OF DRILLI AT THIS LOCATION CONDITIONS ENCOUN	NG. WITH THE
SAMPLE	READING	£÷)	2.00-0.50 Smd -Medium Sar		_	T	I		HE. INC DAIR PRO	SENII	13 A				CONDITIONS ENCOUN	TERES.
SAI			0.50-0.25		S	MELL	ш	SOIL ASSIFICATION		_			CRIPTIC			_
EN	PID/OVA	DEPTH	Sfn -Fine Sand 0.25-0.062	,	GRAPHICS	ᅼ	1	35				-		-	AND AND GRAVEL SIZ ING, ACCESSORY	E
ũ	è	ă	Slt -Silt <0.00	- 1	늍	屈尾	ISI	150 150			-				LITHIC FRAGMENTS	
	<u>F.</u>		Cl -Clay/Mud		용	SS	운	SS				SEDIMENTA	-	-		
			GVL Scr Smd Sfn S	lt Cl		8		CLe								
		0 -			Ш	 	-		ASPHALT							
	i				ΪH											
					Ш	ľ										
		-														
		5 -			Щ.	├—	L									
		-			$ \cdot $											
					Ш											
		Ĺ _														
					Ш	1										
		- 10-			Щ											
					Ш											
					Ш											
					Ш			i i								
				1												
		- 15-							-				_			
	j			ļ		ł										
	İ	- 1														
	+	-														
		- 20			╫		-									
	-															
1		• -														
- 1		!				1	ı									

SHEET 1 OF 2

									CONTRACTOR ON-SITE SERVICES					
I	PROJE	CT	NAME .	RE	ED		•	-	LLERTON DRILLER(S) ON-SITE SERVICES					
F	PROJE	CT	NO.		_	94		87 1-0						
5	ITE G	EO	LOGIST(S)				_	SSM	·					
	<u>.OGG</u>							SSM_						
E	LEVA'	TIO	NS(REL. MSL))					LOCATION T R SEC. 1/4					
	GR	(AD	E LEVEL(ft)	_					CITY FULLERTON CO _OR					
	TO	PO	F CASING(ft)				ì	N/A	COORDINATES(ft)					
R	ECOR	D:			D	АТЕ	/T	ME	GROUNDWATER: DEPTH(ft) DATE/TIME					
	DR	LG,	CORING .			1/11	/95	5	N/A					
		•	CONST			1/11	/9:	5						
	WE	ELL	DEVELOP			N	/A		<u>P</u> SPL* <u>N/A</u> <u>N/A</u>					
			FILL			1/11		5	(* PRIOR TO INITIAL DEVELOPMENT)					
			LITHOLOGICAL PR	OFILE					BRATION DATE: 1/6/95 CALIBRATION UNITS: 95 pom SIGNAL (READING) PRODUCED REPRESENTS A QUALITATIVE MEASURE OF IONIZABLE					
			Gvl -Gravel			ORGAN	IIC	POLLU	UTANTS.					
	ENG		> 2.0 mm Scr -Coarse Sa	~1		THIS SUBSU	SUM	MARY CE CO	APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. ONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE IME. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTERED.					
SAMPLE	READING	£	2.00-0.50	ITEM		T	1							
Æ		_	Smd - Medium Sa 0.50-0.25			WELL CONSTRUCTION		ATION	DESCRIPTION					
	PID/OVA	EPTH	Sfn -Fine Sand		GRAPHICS	E	뽘	<u>'</u> E	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE					
EN	2		0.25-0.06	2 mm	Æ	띰쬞	ST	탪	RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY					
	PI		Slt -Silt <0.0	62 mm	Ř	TS.	Ď	SSI	MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.					
			Cl -Clay/Mud	1.4 61	٠		_	SOIL CLASSIFICE	BEDIONIO CHER SEDINERINI STROGGARD.					
		- 0 -	Gvi Scr Smd Sfn S	ite				٥	ASPHALI					
									B-SCRBILL					
		ļ .			Ш									
		L .												
		- 5 -			Щ									
					Ш									
		_	1		Ш									
		-	1											
			1											
		- 10 -			Ш									
ľ		-			Ш									
		_			Ш									
	ŀ				Ш									
1					W	1	sm	ML	CLAYEY SILI: BROWN.					
		- 15-			21	1								
	ŀ				Ш									
	-													
2					Щ	-	SM	SM	SILTY SAMD: INCREASING SAND-FINE TO MEDIUM GRAIN, BROWN,					
-		- 20-			11	}	241	JH						
					İΜ	1								
					Щ									
3		7		ľ	44	1	SM	SM	SILTY SAMD: FINE TO MEDIUM GRAIN.					

	- 1		LITHOLOGICAL PROFILE			C	ONVE	RSE ENVIRONMENTAL WEST - U.C. SHEET 2 OF 2
	92		Gvi -Gravel > 2.0 mm		V	P	ROJE:	CT NAME RED FAGLE/FULLERTON LOG OF: BH-12
щ	READING		Scr -Coarse Sand					
ENV SAMPLE	Ä	++	2.00-0.50 mm Smd -Medium Sand	"	WELL CONSTRUCTION	111	SOIL CLASSIFICATION	DESCRIPTION
SA				GRAPHICS	75	3] E	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE
2	PID/OVA	F	0.50-0.25 mm Sfn -Fine Sand 0.25-0.062 mm Slt -Silt <0.062 mm	표	급질	ST		RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY
E	2	8	stt -silt <0.062 mm	R	ST	ö	SI	MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS
	PI		Ct -Clay/Mud	G	Š	Σ	S-S	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.
		- 25-	Gvl Scr Smd Sfn Slt Cl				ರ	
				Ш				
		•		ШW				
				\\ '				
4				77		sm	ML	CLAYEY SILT: INCREASING CLAY, BROWN.
_		- 30-		33				
				Ш				
				Ш	l			
_				Щ				SAMD: FINE TO MEDIUM GRAIN, LT. BROWN.
5		- 35 -				SM	SP	THE TO REPORT WORKY DIT SHOULD
				ПП				
				Ш				
6		٠.		77		sm	ML	CLAYFY SILT: SOME FINE GRAIN SAND, DRK. BROWN.
\vdash		- 4 0-		21				
				Ш	<u> </u>			PROPERTY TOTAL REPORT - /4 SEET BELOW COMIND CHREACE
								PROBER'S TOTAL DEPTH = 41 FEET BELOW GROUND SURFACE. NO FREE GROUND WATER ENCOUNTERED BELOW GROUND SURFACE.
		45			_		<u> </u>	
		ļ.						
		. 5 0.						
		- 50						
		•						
		٠.						
		Γ.						
		- 55						
		- 60-						
		L .						
		. CF						
		- 65						

SHEET 1 OF 2

			_						CONTRACTOR ON-SITE SERVICES	_
1	PROJE	CT	NAME _	RE	D	EAG	LE,	/FUL	LLERTON DRILLER(S) ON-SITE SERVICES	_
	PROJE					94		871- 0	· .	-
			LOGIST(S) _					SSM		 N/A
	LOGG:				_			<u>SSM</u>	DRLR TD(ft) 41.00 WELL CONST TD(ft) LOCATION T R SEC. 1/4	IN/A
E.			NS(REL, MSL) E LEVEL(ft)						CITY FULLERTON CO _	OR
			F CASING(ft)					V/A		44
R	ECOR		r Casholic		D	ATE			GROUNDWATER: DEPTH(ft) DATE/TIME	
••			CORING _			1/11	•		▼ ATD N/A	
		•	CONST _			1/11	•		□ SWL* N/A	_
			DEVELOP _			N/	•		₽ SPL* N/A N/A	_
			FILL			1/11			(* PRIOR TO INITIAL DEVELOPMENT)	
┢	БД		LITHOLOGICAL PRO	DFILE		PID/0	IVA	CALIB	BRATION DATE: 1/6/95 CALIBRATION UNITS: 95 pom	_
			Gvl -Gravel			THE P ORGAN	IID/	OVA S POLLU	SIGNAL (READING) PRODUCED REPRESENTS A QUALITATIVE MEASURE OF IONIZABLE UTANTS.	
	ING		> 2.0 mm Scr -Coarse San	vd		THIS	SUM	MARY CE CO	APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING ONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WINE. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTED.	TH THE
SAMPLE	READING	£	2.00-0.50			1				
SA		l	Smd -Medium San 0.50-0.25		S	É	ш	CATION	DESCRIPTION	
EN EN	Š	ЕРТН	Sfn -Fine Sand 0.25-0.062	,	၌	그	2	급	OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY	
□	PID/OVA	┌╸	Slt -Silt <0.06	· I	GRAPHICS	HE.	MOISTURE	SH	MINERALS AND FOSSILS, X QUARTZ, X FELDSPAR, X LITHIC FRAGMENTS	
			Cl -Clay/Mud		9	MELL	욷	SOIL	BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.	
		- 0-	Gvl Scr Smd Sfn Sl	tCl		ပ		ᆸ		
		. " .						•	ASPHALI	
					$\parallel\parallel\parallel$					
			-							
_		5 -			₩					
		-			Ш					
		-			łł					
		-			$\parallel \parallel \parallel$					
			1							
\vdash		10-		$\overline{}$	₩					
		L -	1							
				ł	Ш					
		-								
1					7		sm	ML	CLAYEY SILI: BROWN.	
		- 15-			77	1				
	ĺ				Ш					
				J						
					Щ				CAMPA CALL. INCORPORATIO CAMP CAMP CAMP CAMPA CA	
2		- 20-					SM	SM	SAMDY SILT: INCREASING SAND-FINE TO MEDIUM GRAIN, BROWN,	
				}	$ \uparrow \uparrow $					
3					Щ		S.m.	SM	SAMDY SILT: FINE TO MEDIUM GRAIN SAND, MICACEOUS.	
_					1:1:	1	3411	<u>س</u>		